1. A method for determining a present coil temperature of a coil of a magnetorheological (MR) damper of an operating automotive vehicle, wherein the coil is powered by an output of a controller connected to the coil through a conductor, and wherein the method comprises the steps of:

a) calculating that the operating automotive vehicle is in a cold start condition;

b) calculating a cold-start coil-plus-conductor resistance from the voltage and the current of the output of the controller when the controller applies a test current to the coil and the conductor;

c) calculating a conductor resistance by subtracting a cold-start coil resistance, corresponding to a cold-start coil temperature, from the cold-start coil-plus-conductor resistance;

d) calculating a present coil-plus-conductor resistance from the voltage and the current of the controller when the controller applies a test current to the coil and the conductor;

e) calculating a present coil resistance by subtracting the conductor resistance from the present coil-plus-conductor resistance; and

f) calculating the present coil temperature using at least the present coil resistance, the cold-start coil resistance, the cold-start coil temperature, and a coefficient of the coil.

2. The method of claim 1, wherein the conductor includes a wiring harness.

3. The method of claim 1, wherein step a) calculates that the operating automotive vehicle is in a cold start condition using at least an elapsed time since the automotive vehicle was last operating.

4. The method of claim 1, wherein step a) calculates that the operating automotive vehicle is in a cold start condition when the absolute value of the difference between a first temperature measured by a first temperature sensor of

the automotive vehicle and a second temperature measured by a second temperature sensor of the automotive vehicle is within a preselected value.

5. The method of claim 1, also including repeating steps d) through f) a plurality of times.

6. The method of claim 5, wherein the plurality of times include times the automotive vehicle is traveling below a predetermined speed.

7. The method of claim 5, wherein the plurality of times include times when the time since step f) was last repeated is longer than a preselected time interval.

8. The method of claim 5, wherein the plurality of times include times when the controller voltage and current for controlling the MR damper are substantially equal to the voltage and the test current of step d).

9. The method of claim 5, wherein a coil temperature calculated at time T by repeating step f) is determined to be an invalid coil temperature when the absolute value of the difference between the coil temperatures or coil resistances calculated at time T and at a closest previous time exceeds a predetermined value.

10. The method of claim 9, wherein, when a coil temperature of step f) is determined to be an invalid coil temperature, the closest-in-time previous coil temperature is used in place of the invalid coil temperature.

11. The method of claim 9, wherein the automotive vehicle has additional MR dampers, and wherein, when a coil temperature of step f) is determined to be an invalid coil temperature, a function of at least one of the coil temperatures of the additional MR dampers of the automotive vehicle is used in place of the invalid coil temperature.

12. A method for determining a coil temperature of a coil of a magnetorheological (MR) damper of an operating automotive vehicle, wherein the coil is powered by an output of a controller connected to the coil through a conductor, and wherein the method comprises the steps of:

a) calculating if the operating automotive vehicle is in a cold start condition or a warm start condition;

b) if step a) calculates that the operating automotive vehicle is in a cold start condition, then performing the steps of:

(1) calculating a cold-start coil-plus-conductor resistance from the voltage and the current of the output of the controller when the controller applies a test current to the coil and the conductor;

(2) calculating a cold-start conductor resistance by subtracting a cold-start coil resistance, corresponding to a cold-start coil temperature, from the cold-start coil-plus-conductor resistance;

(3) calculating a present coil-plus-conductor resistance from the voltage and the current of the controller when the controller applies a test current to the coil and the conductor;

(4) calculating a present coil resistance by subtracting the cold-start conductor resistance from the present coil-plus-conductor resistance; and

(5) calculating a present coil temperature using at least the present coil resistance, the cold-start coil resistance, and the cold-start coil temperature; and

c) if step a) calculates that the operating automotive vehicle is in a warm start condition, then performing the steps of:

(1) calculating a present coil-plus-conductor resistance from the voltage and the current of the controller when the controller applies a test current to the coil and the conductor;

(2) calculating a present coil resistance by subtracting the cold-start conductor resistance from the present coil-plus-conductor resistance; and

(3) calculating a present coil temperature using at least the present coil resistance, a warm-start coil resistance, and a warm-start coil temperature.

13. The method of claim 12, wherein the conductor includes a wiring harness.

14. The method of claim 12, wherein step a) calculates if the operating automotive vehicle is in the cold start condition or the warm start condition using at least an elapsed time since the automotive vehicle was last operating.

15. The method of claim 12, wherein step a) calculates if the operating automotive vehicle is in a cold start condition or a warm start condition using at least if the absolute value of the difference between a first temperature measured by a first temperature sensor of the automotive vehicle and a second temperature measured by a second temperature sensor of the automotive vehicle is within a preselected value.

16. The method of claim 12, also including, if step a) calculates that the operating automotive vehicle is in a cold start condition, repeating steps b)(3) through b)(5) a plurality of times, and, if step a) calculates that the operating automotive vehicle is in a warm start condition, repeating steps c)(1) through c)(3) a plurality of times.

17. The method of claim 16, wherein the plurality of times include times the automotive vehicle is traveling below a predetermined speed.

18. The method of claim 16, the plurality of times include times when the time since step b)(5) was last repeated, if step a) calculated a cold start condition, or include times when the time since step c)(3) was last repeated, if step a) calculated a warm start condition, is longer than a preselected time interval.

19. The method of claim 16, wherein the plurality of times include times when the controller voltage and current for controlling the MR damper are substantially equal to the voltage and the test current of step b)(3) if step a)

calculated a cold start condition or are substantially equal to the voltage and the test current of step c)(1) if step a) calculated a warm start condition.

20. The method of claim 16, wherein a coil temperature calculated at time T by repeating a coil temperature calculation step is determined to be an invalid coil temperature when the absolute value of the difference between the coil temperatures or coil resistances calculated at time T and at a closest previous time exceeds a predetermined value.

21. The method of claim 20, wherein, when a coil temperature is determined to be an invalid coil temperature, the closest previous coil temperature is used in place of the invalid coil temperature.

22. The method of claim 20, wherein the automotive vehicle has additional MR dampers, and wherein, when a coil temperature is determined to be an invalid coil temperature, a function of at least one of the coil temperatures of the additional MR dampers of the automotive vehicle is used in place of the invalid coil temperature.

23. A method for determining a present coil temperature of a coil of a magnetorheological (MR) damper of an operating automotive vehicle, wherein the coil is powered by an output of a controller connected to the coil through a conductor, and wherein the method comprises the steps of:

a) obtaining a conductor resistance;

b) obtaining a reference coil temperature;

c) calculating a reference coil-plus-conductor resistance from the voltage and the current of the output of the controller when the controller applies a test current to the coil and the conductor;

d) calculating a reference coil resistance by subtracting the conductor resistance from the reference coil-plus-conductor resistance

e) calculating a present coil-plus-conductor resistance from the voltage and the current of the controller when the controller applies a test current to the coil and the conductor;

f) calculating a present coil resistance by subtracting the conductor resistance from the present coil-plus-conductor resistance; and

g) calculating the present coil temperature using at least the present coil resistance, the reference coil resistance, the reference coil temperature, and a coefficient of the coil.

24. A method for determining a present coil temperature of a coil of a magnetorheological (MR) damper of an operating automotive vehicle, wherein the coil is powered by an output of a controller connected to the coil through a conductor, and wherein the method comprises the steps of:

a) obtaining a reference coil temperature;

b) calculating a reference coil-plus-conductor resistance from the voltage and the current of the output of the controller when the controller applies a test current to the coil and the conductor;

c) obtaining a coefficient of the coil using at least the reference coil-plus-conductor resistance and the reference coil temperature;

d) calculating a present coil-plus-conductor resistance from the voltage and the current of the controller when the controller applies a test current to the coil and the conductor; and

e) calculating the present coil temperature using at least the reference coil-plus-conductor resistance, the present coil-plus-conductor resistance, the reference coil temperature, and the coefficient.

25. A method for determining a present coil temperature of a coil of a magnetorheological (MR) damper of an operating automotive vehicle, wherein the coil is powered by an output of a controller connected to the coil through a conductor, and wherein the method comprises the steps of:

a) calculating a coil-plus-conductor resistance from the voltage and the current of the output of the controller when the controller applies a test current to the coil and the conductor; and

b) calculating the present coil temperature using at least the coil-plus-conductor resistance and compensating for the resistance of the conductor.

26. A method for determining a coil temperature of a coil of a magnetorheological (MR) damper of an operating automotive vehicle, wherein the coil is powered by an output of a controller connected to the coil through a conductor, and wherein the method comprises the steps of:

a) calculating if the operating automotive vehicle is in a cold start condition or a warm start condition;

b) if step a) calculates that the operating automotive vehicle is in a cold start condition, then performing the steps of:

(1) calculating a cold-start coil-plus-conductor resistance from the voltage and the current of the output of the controller when the controller applies a test current to the coil and the conductor;

(2) calculating a present coil-plus-conductor resistance from the voltage and the current of the controller when the controller applies a test current to the coil and the conductor; and

(3) calculating a present coil temperature using at least the present coil-plus-conductor resistance, the cold-start coil-plus-conductor resistance, and a cold-start coil temperature; and

c) if step a) calculates that the operating automotive vehicle is in a warm start condition, then performing the steps of:

(1) calculating a present coil-plus-conductor resistance from the voltage and the current of the controller when the controller applies a test current to the coil and the conductor; and

(2) calculating a present coil temperature using at least the present coil-plus-conductor resistance, a warm-start coil-plus-conductor resistance, and a warm-start coil temperature.

27. The method of claim 26, wherein the conductor includes a wiring harness.

28. The method of claim 26, wherein step a) calculates if the operating automotive vehicle is in the cold start condition or the warm start condition using at least an elapsed time since the automotive vehicle was last operating.

29. The method of claim 26, wherein step a) calculates if the operating automotive vehicle is in a cold start condition or a warm start condition using at least if the absolute value of the difference between a first temperature measured by a first temperature sensor of the automotive vehicle and a second temperature measured by a second temperature sensor of the automotive vehicle is within a preselected value.

30. The method of claim 26, also including, if step a) calculates that the operating automotive vehicle is in a cold start condition, repeating steps b)(1) through b)(3) a plurality of times, and, if step a) calculates that the operating automotive vehicle is in a warm start condition, repeating steps c)(1) through c)(2) a plurality of times.

31. The method of claim 30, wherein the plurality of times include times the automotive vehicle is traveling below a predetermined speed.

32. The method of claim 30, the plurality of times include times when the time since step b)(3) was last repeated, if step a) calculated a cold start condition, or include times when the time since step c)(2) was last repeated, if step a) calculated a warm start condition, is longer than a preselected time interval.

33. The method of claim 30, wherein the plurality of times include times when the controller voltage and current for controlling the MR damper are substantially equal to the voltage and the test current of step b)(1) if step a) calculated a cold start condition or are substantially equal to the voltage and the test current of step c)(1) if step a) calculated a warm start condition.

34. The method of claim 30, wherein a coil temperature calculated at time T by repeating a coil temperature calculation step is determined to be an invalid coil temperature when the absolute value of the difference between the coil temperatures or coil resistances calculated at time T and at a closest previous time exceeds a predetermined value.

35. The method of claim 34, wherein, when a coil temperature is determined to be an invalid coil temperature, the closest previous coil temperature is used in place of the invalid coil temperature.

36. The method of claim 34, wherein the automotive vehicle has additional MR dampers, and wherein, when a coil temperature is determined to be an invalid coil temperature, a function of at least one of the coil temperatures of the additional MR dampers of the automotive vehicle is used in place of the invalid coil temperature.